

Appendix E: X terminal support

Meridian IVR 2.0/I supports the following X terminals:

- MCX17 X terminal with a 17-inch color monitor
- Explora X terminal with a 17-inch color monitor

For Meridian IVR systems intended for application development, an X terminal with a 17-inch monitor is recommended.

The following sections describe how to cable and configure the X terminal for use with Meridian IVR.

Cabling the X terminal

Information on unpacking and setting up the X terminal is provided in the material that accompanies the X terminal. This information includes instructions to

- unpack and inspect the X terminal
- attach the monitor to the base
- connect the monitor, mouse, and keyboard
- connect to a network using an ethernet connection
- connect to AC power and use the controls and indicators

Cabling the X terminal to the Meridian IVR application processor requires the following components:

- Transceiver cable (10 ft) (NT7D47EA)
- Ethernet transceiver (A0377957)
- Ethernet terminator (A0368825)
- “T” connector (A0368824)
- Ethernet cable (50 ft) [NT7D47BA (A0401138)]
- MCX17 17-inch color X terminal (AS8600)
or
NCD15R 15-inch monochrome X terminal (A0609632)
- DEC style keyboard (A0609639)

Procedure E-1

Connecting the X terminal to the application processor

- 1 Connect one end of the transceiver cable (10 ft).
- 2 Connect the other end of the transceiver cable to the DB15 male side of the ethernet transceiver.
- 3 Connect a “T” connector to the BNC side of the ethernet transceiver.
- 4 Connect the thin ethernet cable (50/100 ft) to the “T” connector.
- 5 Ensure that a 50 Ohm terminator is installed in the opposite side of the “T” connector.
- 6 On the back panel of the X terminal, locate the network selection button. Ensure that this button is pressed to the “in” position for thin ethernet connection.
- 7 Connect the other end of the thin ethernet cable to a “T” connector.
- 8 Ensure that a 50 Ohm terminator is installed in the opposite side of the “T” connector.
- 9 Connect the “T” connector to the BNC “thin” position on the back panel of the X terminal base.

Note: The thin ethernet cable (NT7D47BA/BB) includes the “T” connectors (A0368824) and the 50 Ohm terminators (A0368825).

Configuring the X terminal

The Meridian IVR system can be configured with one X terminal by the ethernet LAN. Performance may be negatively impacted if more than one X terminal is connected to a single Meridian IVR system.

Before setting up the X terminal with the Meridian IVR system, make sure you know the Internet Protocol (IP) addresses of both the application processor and the X terminal. These addresses and node names are configurable and are assigned by the network administrator.

The following procedure describes how to set up the X terminal to allow an auto-boot from the Meridian IVR system every time the X terminal is powered up, reset, or rebooted.

Procedure E-2

Setting up the X terminal in the network

- 1 Ensure that the X terminal is connected to the Meridian IVR system as documented in the previous section.

- 2 Power up the X terminal. Self-testing begins.

If you have an MCX17, the following messages appear. Similar messages appear for other types of X terminal.

```
Boot Monitor V2.6.0
Testing code memory      4.0 Mbytes
Testing data memory      8.0 Mbytes
Network Controller passed xx.xx.xx:xx:xx:xx
Boot Monitor resolution 640X480 60Hz
Server Resolution 1024X768 75 Hz NCD
TFTP load <ESC> to abort
Searching for IP address ...
```

- 3 Press <ESC> (F11 on DEC-style keyboard) to abort. The following messages appear:

```
File transfer aborted
8-bit Color Boot Monitor
>
```

- 4 If you have a 17-inch color monitor made by Motorola or NCD, type the following:

bt /tftpboot/Xncd17c XterminalIPAddress APIPAddress

If you have a 17-inch color monitor made by Explora, type the following:

bt /tftpboot/Xncdtpl XterminalIPAddress APIPAddress

Several lines of dots are displayed as the X terminal is booting. When the terminal finishes booting, the Meridian IVR login window appears on the X terminal. The terminal and host IP addresses are stored in the X terminal NVRAM. The X terminal will now automatically boot up without requiring this procedure.

Procedure E-3 Rebooting the X terminal

When the X terminal has been properly configured, it boots automatically upon power up. However, you should not reboot the X terminal by cycling the power off/on.

- 1** Press the Alt-F3 keys (for DEC-style keyboards) or the <F3> key (for PS2 keyboards) to access a graphical setup window. Fault conditions on the LAN may temporarily prevent access to the setup window.
- 2** Select "Reboot..." from the console menu and click OK to confirm X terminal reboot.

This invokes a terminal reset and self-test, followed by automatic TFTP boot if the X terminal is properly configured and the Meridian IVR host is responding.

If TFTP boot fails or is aborted by pressing <ESC>, the Boot Monitor prompt is displayed. The rs command invokes a terminal reset and self test, followed by automatic TFTP boot if the X terminal is properly configured and the Meridian IVR host is responding.

- 3** If the boot fails, type **rs** followed by <Enter>.

The **bt** command invokes TFTP boot. If the X terminal is not properly configured or if Meridian IVR system software is not installed and running, TFTP boot will time out and fail. If the Ethernet connections are faulty, you may see the message

Error: External Loopback. Check network connection.

Procedure E-4**Responding to the default hosts login chooser window**

The Default Hosts Login Chooser window may be displayed if the Meridian IVR application processor stops responding to the X terminal server after it has already been booted. The host may stop responding because the system has been secured for shutdown or a power failure has affected the Meridian IVR system. Ethernet faults may also prevent host response.

When the Default Hosts Login Chooser window appears, the X terminal starts a 120-second timer and continuously requests a response from the default host IP. After the 120 seconds have elapsed, the X terminal stops looking for the host.

- 1** Select OK to restart the 120-second timer and have the X terminal resume looking for the host.

When the Meridian IVR system has rebooted, it will respond to the X terminal and then display the Meridian IVR Login window.